Update to the Comprehensive Master Plan

The Environment

City of Rockville Planning Commission

Wednesday July 26, 2017

Maryland Land Use Law

Maryland Land Use Article:
Requires municipality to protect sensitive areas, such as streams, wetlands and their buffers, 100-year floodplains, habitats of threatened or endangered species, steep slopes, agricultural or forest land intended for resource protection or conservation…

Maryland Priority Funding Areas (PFA):
Were established to preserve existing communities, make the most efficient and effective use of infrastructure by targeting state resources to build on past investments…reduce development pressure on critical farmland and natural resource areas by encouraging projects in already developed areas.

Maryland Planning Visions:
The highlighted key visions provide the framework for the protection, preservation, and conservation of the City's environmental resources.

Maryland's Twelve Planning Visions

1. **Quality of Life**
2. Public Participation
3. Growth Areas
4. **Community Design**
5. **Infrastructure**
6. Transportation
7. Housing
8. Economic Development
9. **Environmental Protection**
10. **Resource Conservation**
11. **Stewardship**
12. **Implementation**

- Widespread support for protecting, preserving and enhancing all the various environmental components of the city.
- Preserving and enhancing existing natural areas, especially areas that support native species and wildlife habitat.
- Protection and enhancement of trees and native landscapes and concern for the impacts of non-native invasive species and disease.
- Positively rewarding efforts from private property owners that support the City's environmental goals.
- Providing public outreach and education to activate private stewardship that preserve land and create native landscapes and create a community culture of sustainability.
- Concern about impacts of future growth on the City's limited natural resources
- Potential environment benefits of redevelopment and sensitive infill development
- Support for increased initiatives to protect natural resources
- Recognized the challenges and complexity of the issues
- Identified a need for a more collaborative approach, with emphasis on public participation and education.
- A greater emphasis on ways to assess performance and progress

Trends Report

The Environment
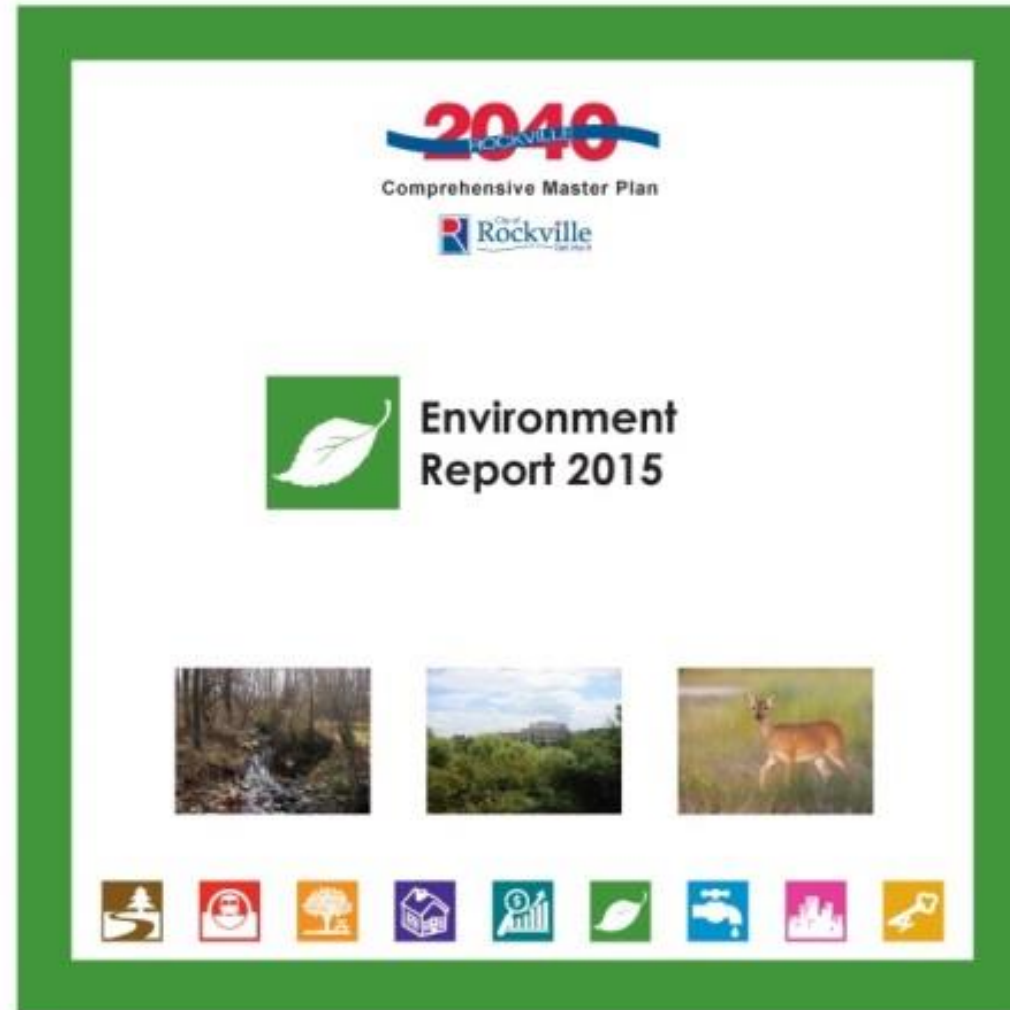
From "Green Infrastructure" by Mark A. Benedict and Edward T. McMahon (The Conservation Fund; Island Press, 2006):

"A land management program seeks to balance natural resource protection with appropriate public uses. There is growing consensus among professional resource managers, landowners, and the general public that a focus on a particular species of wildlife (such as deer) or a specific habitat (such as wetlands) is insufficient and problematic." P. 198

"The solution is to take a comprehensive, holistic approach to managing land and water resources, rather than managing individual species or systems." P.199
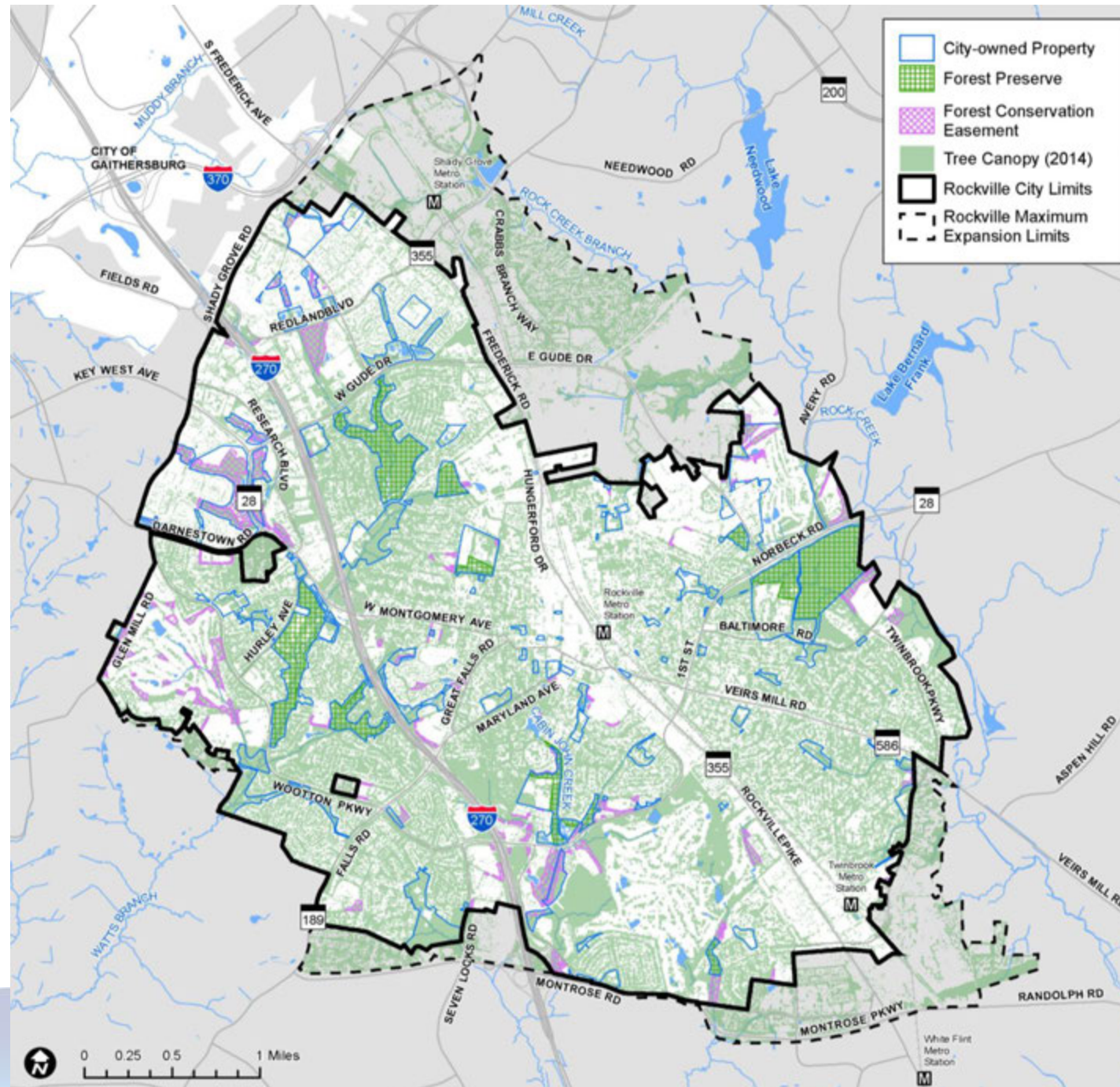
Tree Canopy (2014)
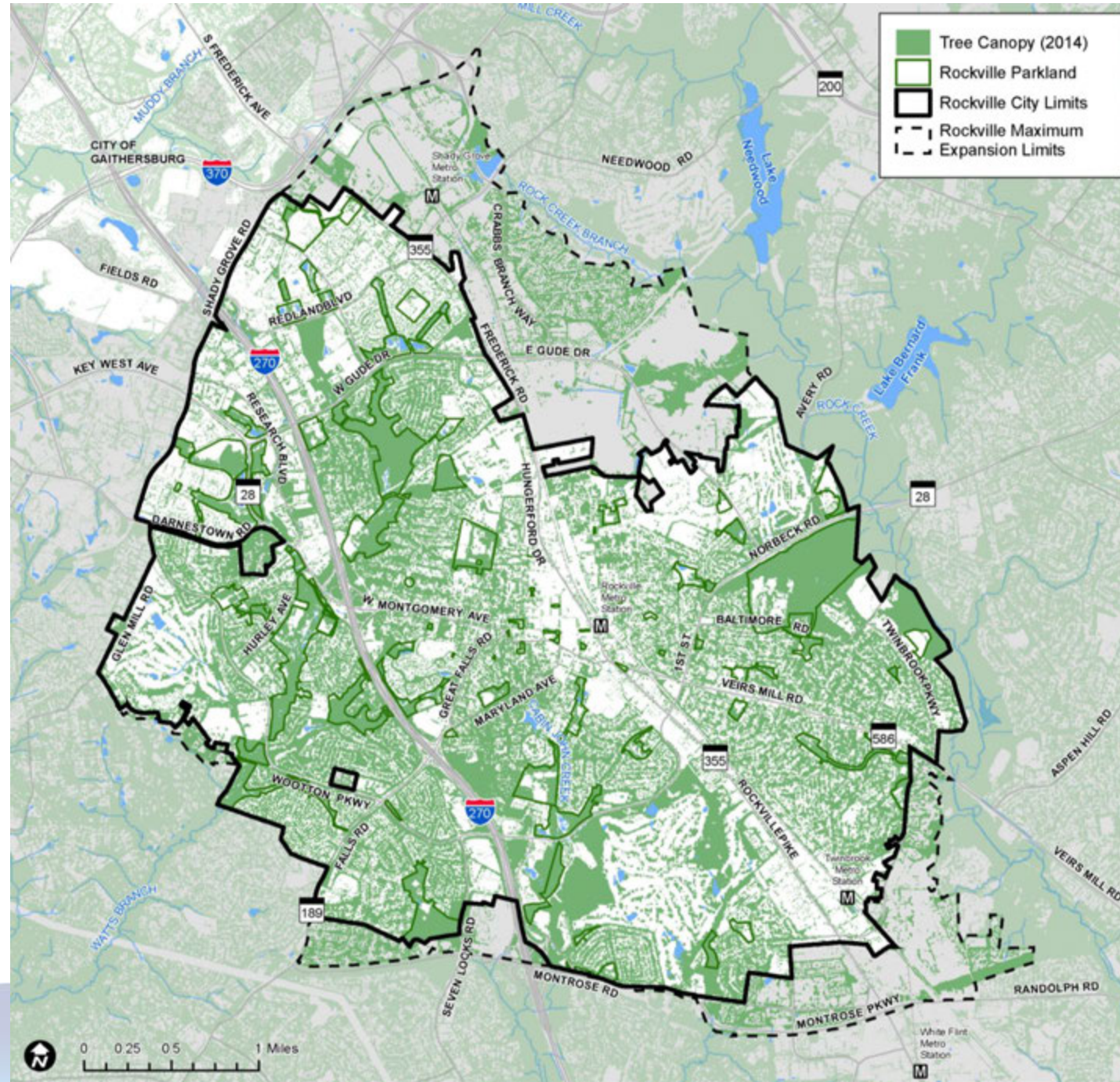
Year	Estimated UTC
2009	43%
2014	50%

Forest Preserves and Forest Conservation Easements

Percent Tree Canopy by Zoning District
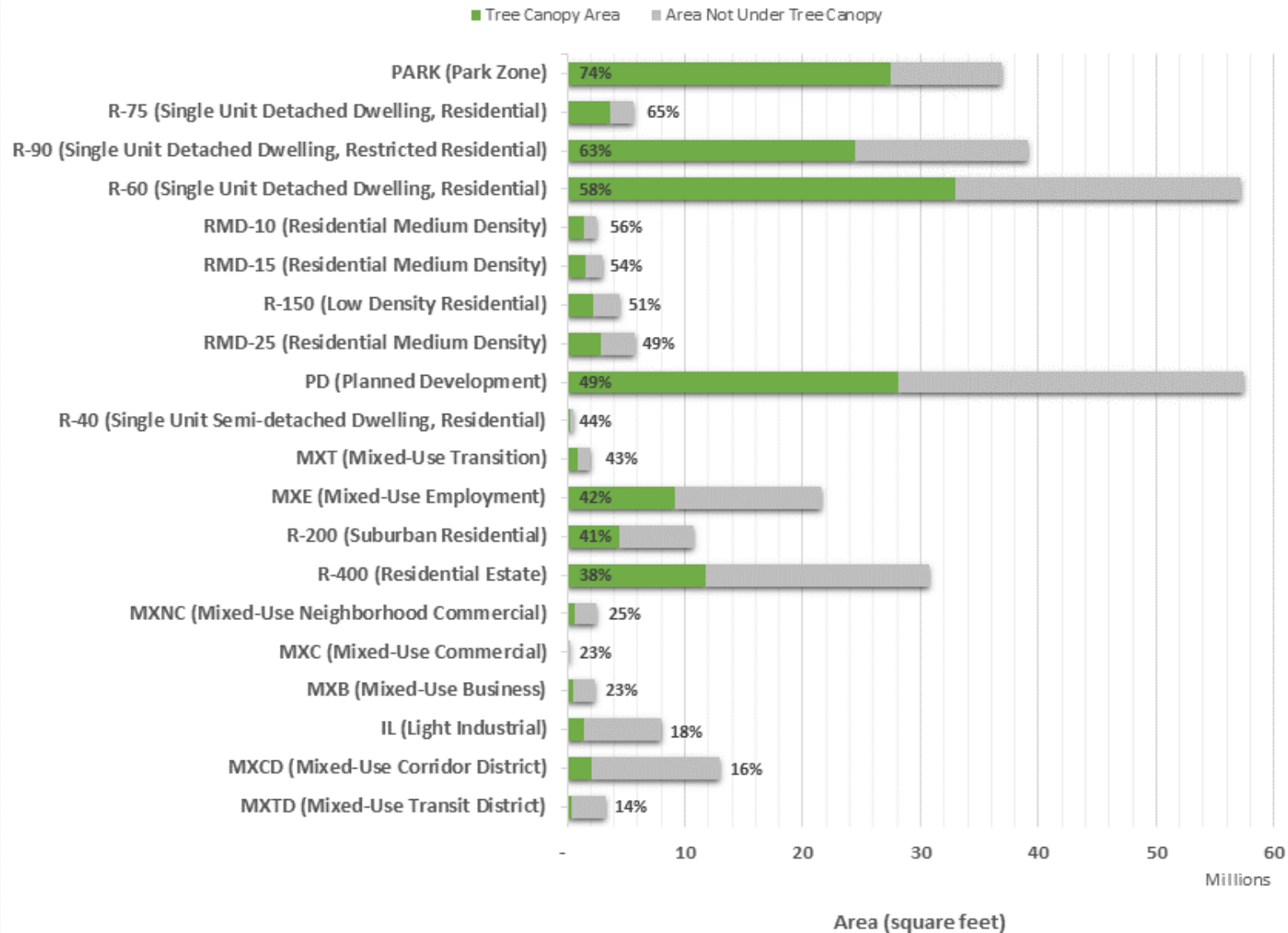
| City of Rockville Tree Canopy and Forest Protection		
	City Limits	
	Acres	%
Total Area	8,670	100%
City-owned parcels	1,094	13%
Forest Preserves	355	4%
Forest Conservation Easements	222	3%
Tree Canopy (2014)	4,301	50%
In City-owned property	759	18%
In Forest Preserves	323	7%
In Forest Conservation Easements	195	5%
All other tree canopy (the majority on privately held land)*	3,418	79%
*Subtotals do not add up to 100% since some tree canopy on city-owned parcels may also be counted as Preserve or Easement area. Some areas protected by forest conservation easements were not completely covered by tree canopy in 2014.		

Wildlife Habitat

Certified Community Wildlife Habitats
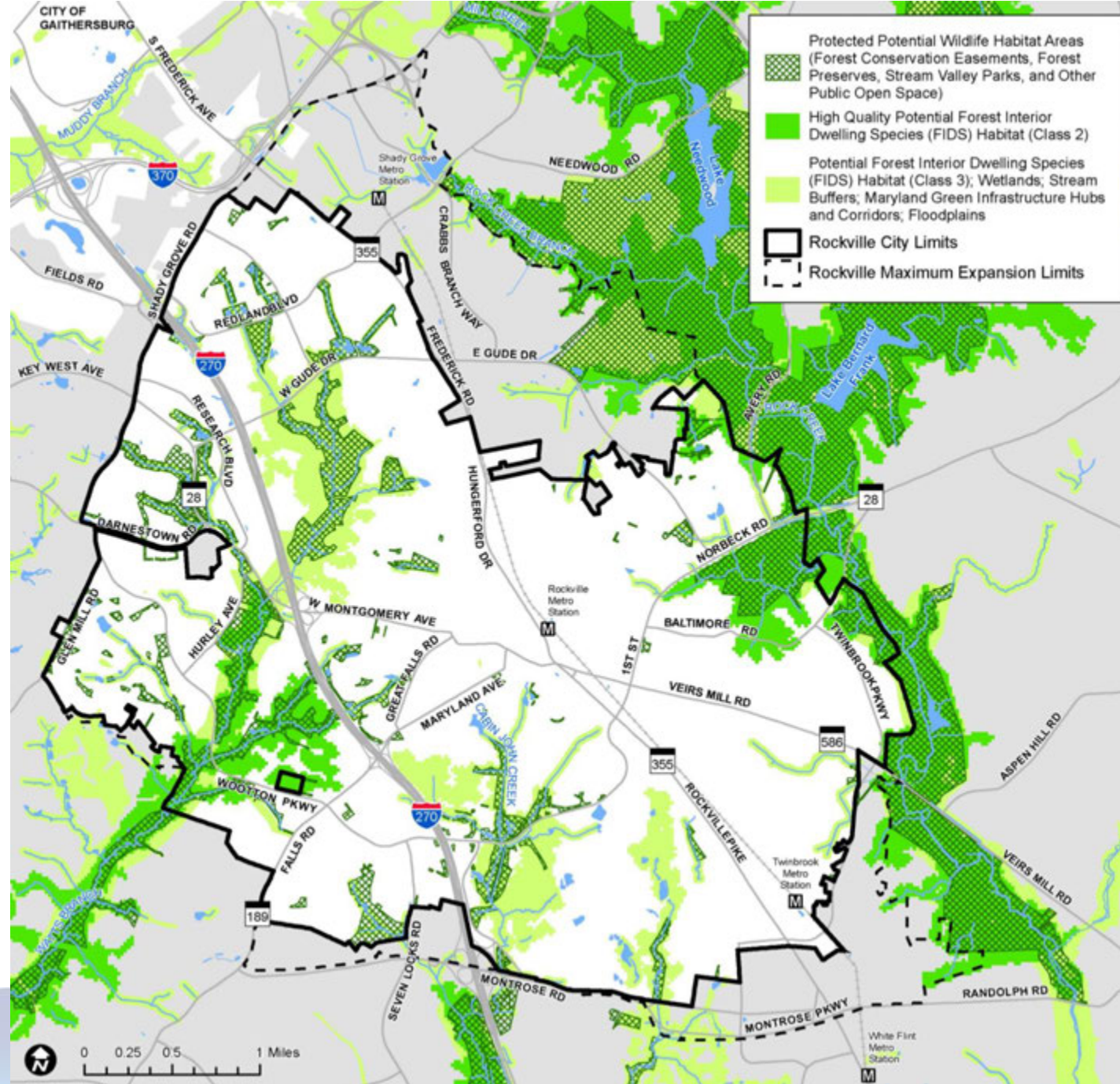
Certified Community Wildlife Habitats
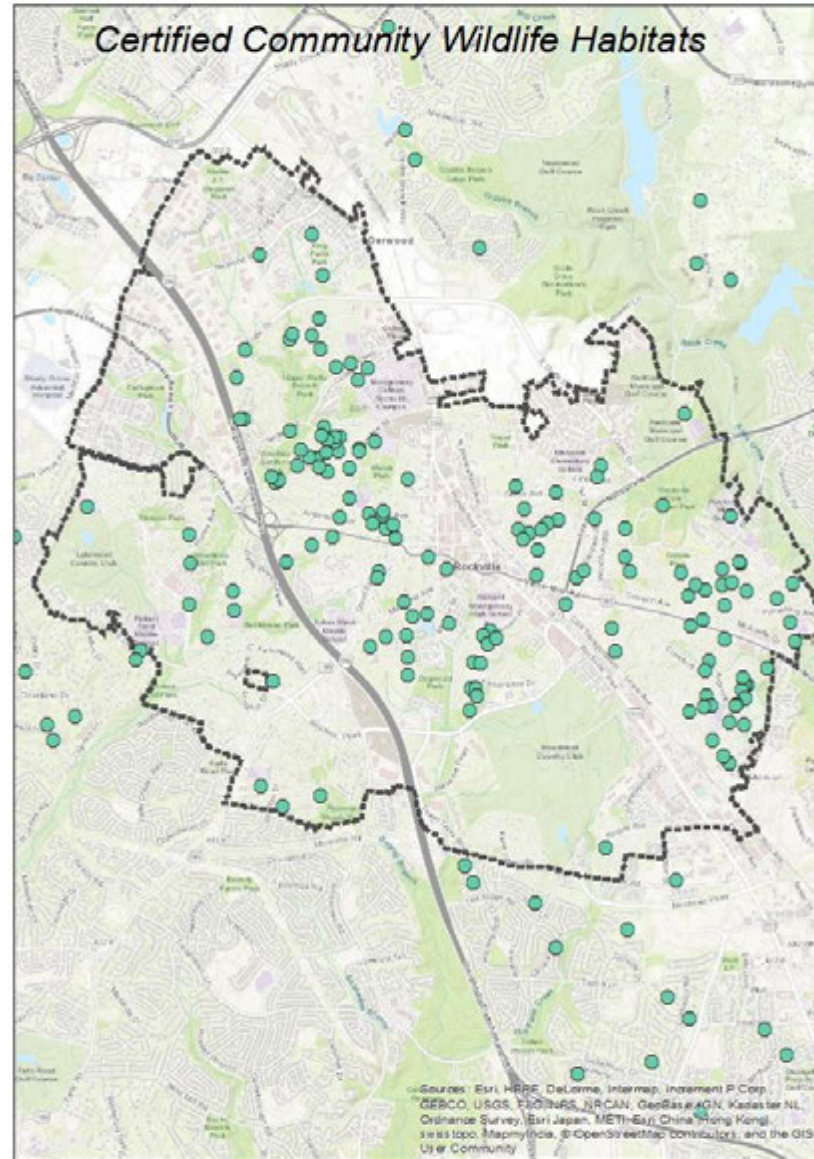
To certify your yard, you need to provide the following:

Examples of food sources:
- native plants
- seeds
- fruits
- nuts
- berries
- nectar

FOOD SOURCES

Examples of water sources:
- birdbath
- pond
- water garden
- stream

WATER SOURCES

Examples of cover:
- thicket
- roosting box
- brush pile
- mature trees

Petrified Forest NPS

Examples of places to raise young:
- dense shrubs
- vegetation
- nesting box
- pond

PLACES TO RAISE YOUNG

Examples of sustainable gardening:
- Use of native plants
- No or limited use of chemicals

Develop a Greenspace Management Plan

- Management tool for the ongoing stewardship of our green environment
- Similar to the Historic Resources Management Plan
- Developed with stakeholder groups
- Not part of Master Plan – can respond more quickly to changing events/technology

- Example of what such a plan might include:
  - Environmental Inventory and Assessment (building upon work already completed):
    - Flora (trees, understory, meadows, non-native invasive species, etc.)
    - Fauna (wildlife and potential impact of domestic animals)
    - Geology, hydrology and soils
  - Maintenance and sustainability recommendations
  - Recommended work programs
  - Estimated costs

Establish Metrics to guide implementation

Urban Forests and Landscapes Metrics

- Percent tree canopy coverage
- Assessment of species diversity, condition, age distribution, and mortality rates
- Percent of tree canopy protected by forest preserves and forest conservation easements

Wildlife Metrics

- Acres of protected habitat (easements, forest preserves, stream valley parks, and other public open space)
- Number of properties certified as wildlife habitats

Staff Recommendations – Urban Forestry

EV Policy 1:   *Protect, enhance, and maintain a sustainable urban forest network that contains a healthy, diverse, and resilient mixture of trees and vegetation, supports local ecosystem health and biodiversity, and is valued and cared for by the community.*

EV 1.1   Employ urban forestry assessment and valuation techniques that will periodically assess tree canopy coverage, the health and condition of city forests landscaped areas, significant and champion trees, conformance with forest conservation easement requirements, areas impacted by non-native invasive species, and maintenance and management needs.

EV 1.2   Create a Greenspace Management Plan to guide ongoing greenspace and urban tree canopy practices.

EV 1.3   Develop public education, stewardship and incentive programs for planting and maintaining trees and natural landscapes to sustain and enhance tree canopy on private property.

EV 1.4   Continue to update and implement the Forest and Tree Protection Ordinance, the Tree Manual and maintenance procedures to manage tree planting, maintenance, and removals on development sites in a manner that promotes urban forestry goals and mitigates the impacts of development, while providing flexibility for property owners to balance multiple goals and competing uses.

EV 1.5   Update policies and programs to encourage the use of native plants and sustainable landscaping practices and discourage installation of non-native invasive species.

EV 1.6   Develop and implement a non-native invasive plant control policy and program for public property.

EV 1.7   Continue to update and implement the Street Tree Master Plan to maintain healthy, diverse, and safe trees on municipal lands and public streets.

EV 1.8   Protect and enhance tracts of contiguous forest areas and tree canopy along stream valley buffers, wildlife hubs and corridors, and adjacent to existing forest networks.

EV 1.9   Explore, refine, and implement best practices for tree and landscape planting and maintenance in the right-of-way that increases tree longevity and can be integrated with urban infrastructure.

EV 1.10   Collaborate with regional agencies to target and reduce non-native invasive plants, animals, diseases, and pathogens that threaten Maryland ecosystems.

Staff Recommendations – Wildlife

EV Policy 2:   *Protect, restore, and manage a connected network of natural landscapes, forests, open space, parks and green infrastructure that provide ecological benefits, diverse wildlife and plant habitats, recreational opportunities and scenic beauty.*

EV 2.1   Identify and prioritize parcels for land conservation; including parcels that are priority wildlife habitats, contiguous with existing parkland, forest, or otherwise environmentally sensitive lands, gaps in Maryland DNR green infrastructure lands, and opportunities to protect connected networks of natural areas in existing large tracts of land with potential redevelopment opportunities (e.g., existing golf courses).

EV 2.2   Protect natural areas and priority habitats through city codes and ordinances, land acquisition, conservation easements, land donations, grants, or dedication of stream valleys and environmentally sensitive areas.

EV 2.3   Collaborate with regional experts and stakeholders to develop and implement wildlife management strategies that minimize human-wildlife conflicts and support sustainable wildlife populations and monitor progress.

EV 2.4   Ensure that the review and approval of development projects includes implementing wildlife habitat protection and enhancement strategies to maintain corridors for safe wildlife movement, prevent fragmentation of forested lands, and protect and restore habitats.

EV 2.5   Evaluate potential strategies, costs and benefits associated with monitoring and managing invasive species and enhancing habitats on City-owned lands.

EV 2.6   Provide programs that encourage private properties to implement sustainable gardening and landscaping practices that provide wildlife habitat benefits.

EV 2.7   Provide community education programs to foster wildlife appreciation and tolerance.

EV 2.8   Explore programs and incentives to maintain and replace tree canopy and habitat loss on private property that is currently not regulated by City codes and ordinances.